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ASSOCIATION OF FINANCIAL GUARANTY INSURERS

Unconditional, Irrevocable Guaranty

July 24, 2015

Robert de V. Frierson Secretary Federal Reserve of Governors of the Federal Reserve System 20th Street and Constitution Avenue, N.W. Washington, D.C. 20551

Re: Liquidity Coverage Ratio: Treatment of U.S. Municipal Securities as High-Quality Liquid Assets (RIN 7100 AE-32)

Dear Mr. de V. Frierson:

The Association of Financial Guaranty Insurers (AFGI) appreciates the opportunity to provide the Board of Governors of the Federal Reserve System (Federal Reserve) with its comments on the proposed rule, "Liquidity Coverage Ratio: Treatment of U.S. Municipal Securities as High-Quality Liquid Assets" (Proposed Rule).¹

AFGI commends the Federal Reserve for responding, through this Proposed Rule, to the numerous commentators advocating that US municipal securities be treated as high-quality liquid assets (HQLA). We agree that municipal securities, as an asset class, exhibit liquidity characteristics consistent with those considered by the regulatory agencies in identifying HQLA. However, we submit that, to the extent that a given US municipal security meets all the HQLA qualification requirements in the Proposed Rule, the insurance guaranteeing (or "wrapping") such municipal security should not disqualify the municipal security from being treated as HQLA. Please note, in this regard, that we are not advocating at this time that insurance can transform an otherwise low quality and/or illiquid asset into an HQLA. Rather, we are submitting that the addition of insurance should not disqualify a high quality and liquid asset from being treated as HQLA.

AFGI believes that the Proposed Rule's exclusion of insured municipal securities from HQLA will unnecessarily incentivize banks to dispose of insured bonds. This result is inefficient and misinterprets the 2014 final rule language regarding "obligations of a financial sector entity" by being overbroad in its application. Specifically, we submit that there is no support for the view that the addition of incremental credit protection impairs the credit quality or liquidity of a municipal bond (indeed, AFGI members are in the

Federal Reserve, Liquidity Coverage Ratio: Treatment of U.S. Municipal Securities as High-Quality Liquid Assets, 80 Fed. Reg. 30,383-89 (May 28, 2015) (Proposed Rule).

business of enhancing both credit quality and bond liquidity). Nor does the addition of the wrap add a material incremental value to an otherwise high quality liquid asset that would be eliminated in the event of financial distress to the monoline. Accordingly, we respectfully urge the Federal Reserve to amend its rulemaking so as not to disqualify as HQLA those municipal securities that are insured, but that otherwise qualify as HQLA absent such insurance.

I. <u>Disqualifying Municipal Securities from HQLA Solely Because they are</u> Insured is Unnecessary

In the Proposed Rule, the Federal Reserve excludes insured municipal bonds from consideration under HQLA, stating that such insurance "could exhibit similar risks and correlation with Board-regulated institutions (wrong-way risk) during a liquidity stress period." We believe that such assertion of wrong-way risk is overstated. We have analyzed data from two perspectives and include this data in Appendix B: (1) looking at historic trading spreads between insured and uninsured investment grade credits, and (2) measuring the marginal price difference between selected insured and uninsured municipal bonds. As detailed in Appendix B, there is only a marginal price difference between insured and uninsured high quality municipal bonds (averaging 62-214 basis points of bond price). Additionally, the observed price differential remains relatively consistent for short, intermediate, and longer maturities. Also, the trading spreads between insured and uninsured high quality municipal bonds are modest and, in fact, are measured in basis points rather than points. To summarize the 10-year data included in Appendix B, the average yield spread between insured bonds (in the single "A" underlying rating category) and uninsured bonds of the same rating category is 17.0 basis points (bps) on general obligations (GOs). If one only looks at post-crisis data (January 2010 to present), the average spread is quite narrow, only 11.1 bps.⁴

	Underlying 30 year GO vs. Insured GO bond (in single A underlying rating category)
10yr Average Yield Spread	17.0
10yr Standard Deviation	13.4

While the Proposed Rule ignores the benefits of bond insurance insofar as it is provided by a financial institution, please note that financial guaranty insurance provides benefits that do not invoke wrong-way risk, including the roles played by bond insurers to (a) monitor risks, (b) intervene to take remedial actions, and (c) actively participate in restructuring situations. The market place generally acknowledges the superior remedial results obtained by bond insurers compared to those obtained by trustees or ad-hoc bond investor groups on behalf of uninsured bonds.

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² For a detailed overview of the business of financial guaranty insurance, please see *Appendix A*.

³ Proposed Rule, at 30,386.

⁴ Data source: Thomson Reuters. Please note that statistical data is unavailable for underlying "triple-B" rated municipal bonds.

Accordingly, we could find no evidence to support the premise that bond insurance generally impairs the credit or liquidity of a high quality and liquid municipal bond, and there is considerable evidence supporting the benefits of bond insurance regardless of the creditworthiness of, or market value enhancement provided by, the bond insurer. As such, where a US municipal security is treated as HQLA in accordance with the Proposed Rule, bond insurance should not disqualify it from such treatment.

II. <u>Disqualifying Municipal Securities from HQLA Solely Because they are</u> Insured is Inefficient

The Proposed Rule creates an incongruous result whereby the underlying obligation of an issuer could be an HQLA, but for the existence of insurance. As a practical example, this would mean that, while a bank could treat an uninsured New York State bond as an HQLA, it could not treat the same bond insured by a bond insurer as HQLA. Given the large percentage of outstanding municipal bonds that are insured, this exclusion will encourage sales by banks of insured municipal bonds, and marginally distort the municipal bond market. Importantly, the inefficiencies created by the Proposed Rule will negatively impact state and local economies and their ability to develop infrastructure and grow US jobs.

This result is all the more incongruous given that insurance incrementally enhances – rather than impairs – the quality of bonds that would otherwise be treated as HQLA under the Proposed Rule. We acknowledge that the Federal Reserve seeks to ignore the benefit of this enhancement, insofar as it is provided by an insurer categorized as a financial institution. We submit, however, that the Proposed Rule is overbroad in viewing the insurance credit enhancement as an impairment rather than merely ignoring the insurance altogether.

For these reasons, the existence of insurance should not disqualify municipal securities that would otherwise be treated as HQLA under the Proposed Rule.

III. <u>The Proposed Rule Misinterprets the Final Rule Language Regarding "Obligations of a Financial Sector Entity"</u>

The joint final rule on liquidity coverage ratio, released on October 10, 2014, identified as a level 2B liquid asset a corporate debt security that is (1) investment grade,⁵ (2) "issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions" and (3) "not an obligation of a financial sector entity and not an obligation of a consolidated subsidiary of a financial sector entity." In this Proposed Rule, the Federal Reserve amends the liquidity coverage ratio requirement to include certain US municipal

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⁵ Department of Treasury, Federal Reserve, Federal Deposit Insurance Corporation, Liquidity Coverage Ratio: Liquidity Risk Measurement Standards; Final Rule, 79 Fed. Reg. 61,440 (Oct. 10, 2014); Liquidity Risk Measurement Standards, 12 CFR § 249.20(c)(1)(i).

⁶ *Id.* at 12 CFR § 249.20(c)(1)(ii).

⁷ *Id.* at 12 CFR § 249.20(c)(1)(iii).

securities as HQLA, but disqualifies municipal securities that are wrapped by a bond insurer. In so doing, the Federal Reserve does not dispute that there are municipal securities guaranteed by bond insurers that would meet the first two conditions listed above. Rather, the disqualification is premised on an interpretation of the condition that the asset is "not an obligation of a financial sector entity."

The Proposed Rule supports this disqualification by expanding the breadth of the third listed condition to exclude not just obligations of financial entities, **but also obligations that are guaranteed** by financial entities. As such, the Proposed Rule does not properly construe the language and suggested intent of the final rule – as agreed by the three regulatory agencies – and instead broadens the rule language referencing "obligations of a financial sector entity" to include also those obligations guaranteed by bond insurers. The final rule language does not support this expansion, and only by expanding the breadth of the exclusion does the Proposed Rule justify treating a wrapped municipal security as not eligible for HQLA treatment. In other words, we respectfully submit that the addition of an independent alternative but contingent source of payment through insurance should not alter the character of the underlying credit as a municipal, rather than a financial institution, payment source.

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We thank the Federal Reserve for the opportunity to comment on its Proposed Rule. If you have any questions, please do not hesitate to contact the undersigned at bstern@assuredguaranty.com or (212) 339-3482.

Sincerely,

Bruce E. Stern, Chairman

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Association of Financial Guaranty Insurers

⁸ The Proposed Rule states that "the Board considers a security that is issued or guaranteed by a financial sector entity to be an obligation of the financial sector entity." *See* Proposed Rule at 30,388.

APPENDIX A

Brief Overview of Financial Guaranty Insurance

Financial guaranty insurance provided by AFGI members, with respect to municipal bonds, generally guarantees the timely disbursement of scheduled payments of interest and principal due on insured securities. Investors in insured municipal securities may also benefit from the due diligence, surveillance, and remediation activities performed by financial guaranty insurers. Municipal issuers generally use financial guaranty insurance when applying such insurance would result in lower overall financing costs than would otherwise result from issuing securities on an uninsured basis.

While the downgrades of some financial guaranty insurers during the financial crisis⁹ created problems for counterparties to insured interest rate swaps and liquidity providers in the short-term tax exempt market, the record of the industry with respect to paying principal and interest on defaulted municipal bonds has been strong. Indeed, the financial guaranty insurers that are currently operating in the US market maintain strong financial ratings from S&P, Moody's, and Kroll. And, recent upgrades by rating agencies are supported by the bond insurers' strong capital levels, good operating performance, and reductions in legacy structured-finance portfolios. These strong financial ratings are also supported by punctual payment of claims for recent municipal bankruptcies. In fact, because they are sufficiently capitalized, bond insurers continue to insure bonds in struggling municipalities across the United States, including Detroit and Puerto Rico. Bond insurers also work alongside these municipalities to ensure that they meet their financial obligations and improve their economic situation.

Additionally, financial guaranty insurers have tightened their public finance underwriting standards, and their public finance portfolios have performed positively despite increased financial pressure on municipal obligors caused by the economic stress of recent years. Indeed, "municipal bond insurers wrapped 5.5% of the long-term municipal debt issued in 2014, up from 3.4% the previous year."

The strong performance of bond insurers, despite the recent economic stresses of the markets, is also related to the way bond insurers are structured to operate. Bond insurers guarantee scheduled principal and interest payments on the obligations they insure, with the insurer's right (but not the obligation) to pay the principal on an accelerated basis, should the insurer elect to do so in its sole discretion following a payment default by the obligor. State laws expressly prohibit financial guaranty insurers from insuring payments

⁹ Despite such downgrades, Assured Guaranty, for example, has maintained consistently strong financial strength ratings from S&P, Moody's, KBRA, and A.M. Best.

¹⁰ See generally, Kroll Bond Ratings Agency, Beyond the Headlines: Record of Bond Insurers Paying Municipal Bond Claims is Better Than Perception (Apr. 15, 2015) [hereinafter Kroll Paper].

¹¹ See BondBuyer, Insured Muni Volume Sees 61.6% Growth; Penetration Up to 5.5% (Feb. 23, 2015), http://www.bondbuyer.com/news/markets-sell-side/insured-muni-volume-sees-616-growth-penetration-up-to-55-1070645-1.html.

due upon acceleration, unless such payments are in the insurer's sole discretion.¹² This prohibition effectively mitigates the liquidity exposure that financial guaranty insurers might face following a payment default on an insured obligation.

The New York State Department of Financial Services (DFS) is the primary prudential regulator for most US financial guaranty insurance companies, and those domestic insurers that are not domiciled in New York are licensed to issue financial guaranty insurance under New York Insurance Law Article 69 (Article 69) and are therefore also subject to regulation by the DFS. Additionally, financial guaranty insurers domiciled in Europe and Bermuda are regulated appropriately and directly by the applicable sovereign insurance regulators in Europe. Indeed, as highlighted by the Kroll Bond Rating Agency, "as a practical matter, it is highly unlikely that a bond insurer would be allowed by the insurer's regulator to default on bond claims payments as the regulator has the authority to seize the insurer, issue orders and/or petition the state court in order to compel the insurer to pay such claims."¹³

¹² N.Y. Code ISC Insurance § 6905 (2010).

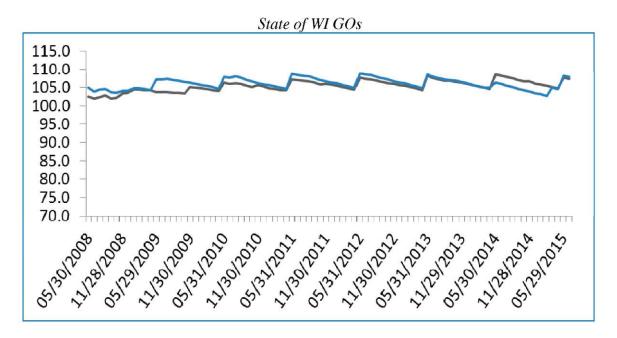
¹³ Kroll Paper, at 5.

APPENDIX B

Price Differential Data for Insured versus Uninsured Bonds

Using the Barclays POINT Municipal Index, the following charts show enhanced (i.e., insured) versus unenhanced trading values for a sample set of high-grade, general obligation municipal issuers that would likely qualify as HQLA.¹⁴

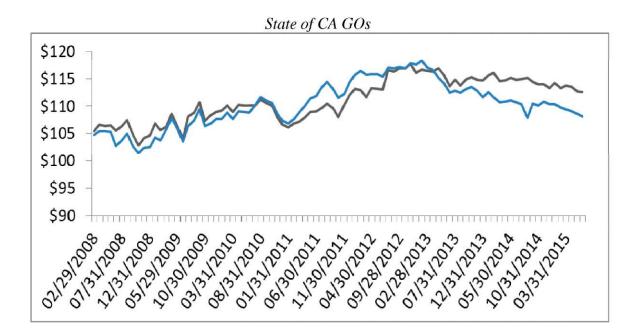
Enhanced and unenhanced bonds are from the same issuer in each case and are legally equivalents (parity debt). For these issuers, there is only a marginal price difference between enhanced and unenhanced bonds (averaging of 62-214 bps of bond price). Further, the observed price differential remains relatively consistent for short, intermediate and longer maturities. Insured values also present a weighted average price of that issuer's bonds bearing insurance from multiple monolines (e.g., Assured, National, and Ambac).



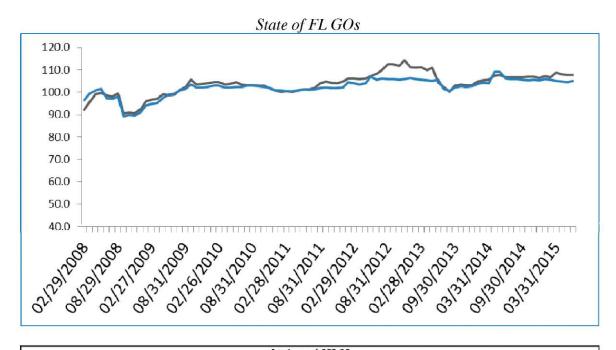
Avg Insured Price- 105.98 Avg Uninsured Price- 105.36 Avg Differential- 0.62

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¹⁴ Eligibility rules for Barclay's POINT municipal index: (1) bonds must have at least one year-to-maturity; (2) non-credit enhanced bonds (municipal debt without a guarantee) must be rated investment grade (Baa3/BBB-/BBB- or better) by looking to the middle rating of Moody's, S&P, and Fitch (after dropping the highest and lowest available ratings) to determine a security's index eligibility. Prior to using this 2 out of 3 rating criterion in July 1, 2005, we first used Moody's ratings as the primary source and then the more conservative of Moody's and S&P's ratings; (3) securities must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. Prior to January 1, 2005, the liquidity constraint was \$50 million/\$5 million. The liquidity constraint for several lower capitalized state specific benchmarks is \$20 million deal size and \$2 million issue size; (4) taxable municipal bonds, remarketed issues, bonds with floating-rates, and derivatives are excluded; and (5) bonds with a dated-date of January 1, 1991 and later are eligible for inclusion into the benchmark.







Avg Insured-102.14 Avg Uninsured Price-103.60 Avg Differential-1.45

New York City, NY GOs

\$80

Historical Insured Spreads

\$125 \$120 \$115 \$110 \$105 \$100 \$95 \$90 \$85

Using data sourced from Thomson Reuters, we have created spreadsheets showing the spread and yield relationships between theoretical insured and uninsured bonds "A" rated GO bonds.

Avg Insured Price- 108.29 Avg Uninsured Price- 110.44 Avg Differential- 2.14

	Underlying
	30yr GO vs.
	insured GO
	bond (in
	single A
	underlying
	rating
	category)
	A GO 30 yr -
	Insured
	Scales 30 yr
1/7/2005	11
1/14/2005	11
1/21/2005	11
1/28/2005	11
2/4/2005	11
2/11/2005	12
2/18/2005	11

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating
	A GO 30 yr - Insured Scales 30 yr
2/25/2005	11
3/4/2005	10
3/11/2005	10
3/18/2005	10
3/24/2005	10
4/1/2005	10
4/8/2005	10

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating category)
	A GO 30 yr - Insured
	Scales 30 yr
4/15/2005	10
4/22/2005	10
4/29/2005	12
5/6/2005	14
5/13/2005	14
5/20/2005	14
5/27/2005	14

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating
	category)		category)		category)
	A GO 30 yr -		A GO 30 yr -		A GO 30 yr -
	Insured Scales 30 yr		Insured Scales 30 yr		Insured Scales 30 yr
6/3/2005	13	1/6/2006	17	8/11/2006	11
6/10/2005	12	1/13/2006	18	8/18/2006	11
6/17/2005	14	1/20/2006	18	8/25/2006	11
6/24/2005	14	1/27/2006	18	9/1/2006	12
7/1/2005	14	2/3/2006	18	9/8/2006	12
7/8/2005	14	2/10/2006	18	9/15/2006	12
7/15/2005	15	2/17/2006	17	9/22/2006	15
7/22/2005	15	2/24/2006	16	9/29/2006	15
7/29/2005	15	3/3/2006	17	10/6/2006	15
8/5/2005	16	3/10/2006	17	10/13/2006	15
8/12/2005	16	3/17/2006	17	10/20/2006	14
8/19/2005	16	3/24/2006	17	10/27/2006	14
8/26/2005	16	3/31/2006	17	11/3/2006	13
9/2/2005	17	4/7/2006	15	11/10/2006	12
9/9/2005	17	4/13/2006	15	11/17/2006	11
9/16/2005	16	4/21/2006	15	11/24/2006	11
9/23/2005	15	4/28/2006	15	12/1/2006	13
9/30/2005	15	5/5/2006	16	12/8/2006	11
10/7/2005	15	5/12/2006	16	12/15/2006	12
10/14/2005	15	5/19/2006	16	12/22/2006	12
10/21/2005	15	5/26/2006	15	12/29/2006	12
10/28/2005	16	6/2/2006	14	1/5/2007	12
11/4/2005	16	6/9/2006	15	1/12/2007	12
11/10/2005	16	6/16/2006	15	1/19/2007	12
11/18/2005	17	6/23/2006	15	1/26/2007	12
11/25/2005	17	6/30/2006	14	2/2/2007	12
12/2/2005	17	7/7/2006	14	2/9/2007	12
12/9/2005	18	7/14/2006	10	2/16/2007	12
12/16/2005	17	7/21/2006	10	2/23/2007	12
12/23/2005	17	7/28/2006	11	3/2/2007	11
12/30/2005	17	8/4/2006	11	3/9/2007	11

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating
	category)		category)		category)
	A GO 30 yr - Insured		A GO 30 yr - Insured		A GO 30 yr - Insured
	Scales 30 yr		Scales 30 yr		Scales 30 yr
3/16/2007	11	10/19/2007	24	5/23/2008	30
3/23/2007	11	10/26/2007	26	5/30/2008	30
3/30/2007	10	11/2/2007	27	6/6/2008	32
4/6/2007	10	11/9/2007	31	6/13/2008	29
4/13/2007	10	11/16/2007	28	6/20/2008	18
4/20/2007	10	11/23/2007	30	6/27/2008	17
4/27/2007	11	11/30/2007	34	7/3/2008	21
5/4/2007	11	12/7/2007	30	7/11/2008	24
5/11/2007	11	12/14/2007	30	7/18/2008	21
5/18/2007	11	12/21/2007	29	7/25/2008	18
5/25/2007	11	12/28/2007	29	8/1/2008	19
6/1/2007	11	1/4/2008	28	8/8/2008	17
6/8/2007	13	1/11/2008	29	8/15/2008	18
6/15/2007	14	1/18/2008	30	8/22/2008	18
6/22/2007	14	1/25/2008	30	8/29/2008	19
6/29/2007	14	2/1/2008	30	9/5/2008	17
7/6/2007	14	2/8/2008	29	9/12/2008	18
7/13/2007	14	2/15/2008	28	9/19/2008	17
7/20/2007	14	2/22/2008	20	9/26/2008	17
7/27/2007	13	2/29/2008	16	10/3/2008	21
8/3/2007	13	3/7/2008	18	10/10/2008	24
8/10/2007	15	3/14/2008	13	10/17/2008	38
8/17/2007	15	3/20/2008	12	10/24/2008	46
8/24/2007	15	3/28/2008	11	10/31/2008	41
8/31/2007	23	4/4/2008	14	11/7/2008	40
9/7/2007	22	4/11/2008	29	11/14/2008	40
9/14/2007	21	4/18/2008	25	11/21/2008	50
9/21/2007	22	4/25/2008	26	11/28/2008	45
9/28/2007	22	5/2/2008	23	12/5/2008	69
10/5/2007	21	5/9/2008	27	12/12/2008	73
10/12/2007	21	5/16/2008	31	12/19/2008	96

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating		Underlying 30yr GO vs. insured GO bond (in single A underlying rating
	category) A GO 30 yr -		category) A GO 30 yr -		A GO 30 yr -
	Insured		Insured		Insured
	Scales 30 yr		Scales 30 yr		Scales 30 yr
12/26/2008	98	7/31/2009	30	3/5/2010	19
1/2/2009	79	8/7/2009	32	3/12/2010	16
1/9/2009	75	8/14/2009	32	3/19/2010	16
1/16/2009	72	8/21/2009	33	3/26/2010	16
1/23/2009	73	8/28/2009	32	4/1/2010	16
1/30/2009	62	9/4/2009	32	4/9/2010	16
2/6/2009	60	9/11/2009	32	4/16/2010	16
2/13/2009	64	9/18/2009	31	4/23/2010	17
2/20/2009	64	9/25/2009	27	4/30/2010	17
2/27/2009	62	10/2/2009	26	5/7/2010	17
3/6/2009	64	10/9/2009	25	5/14/2010	17
3/13/2009	69	10/16/2009	24	5/21/2010	17
3/20/2009	78	10/23/2009	25	5/28/2010	15
3/27/2009	87	10/30/2009	26	6/4/2010	15
4/3/2009	84	11/6/2009	29	6/11/2010	10
4/9/2009	81	11/13/2009	30	6/18/2010	13
4/17/2009	63	11/20/2009	29	6/25/2010	13
4/24/2009	47	11/27/2009	29	7/2/2010	10
5/1/2009	47	12/4/2009	26	7/9/2010	10
5/8/2009	37	12/11/2009	25	7/16/2010	10
5/15/2009	26	12/18/2009	21	7/23/2010	10
5/22/2009	26	12/24/2009	21	7/30/2010	10
5/29/2009	25	12/31/2009	21	8/6/2010	10
6/5/2009	27	1/8/2010	21	8/13/2010	9
6/12/2009	30	1/15/2010	21	8/20/2010	9
6/19/2009	30	1/22/2010	21	8/27/2010	9
6/26/2009	31	1/29/2010	21	9/3/2010	9
7/2/2009	30	2/5/2010	21	9/10/2010	9
7/10/2009	30	2/12/2010	21	9/17/2010	9
7/17/2009	30	2/19/2010	20	9/24/2010	9
7/24/2009	29	2/26/2010	20	10/1/2010	9

	Underlying		Underlying		Underlying
	30yr GO vs.		30yr GO vs.		30yr GO vs.
	insured GO		insured GO		insured GO
	bond (in		bond (in		bond (in
	single A		single A		single A
	underlying		underlying		underlying
	rating		rating		rating
	category)		category)	,	category)
	A GO 30 yr - Insured		A GO 30 yr - Insured		A GO 30 yr - Insured
	Scales 30 yr		Scales 30 yr		Scales 30 yr
10/8/2010	9	5/13/2011	11	12/16/2011	13
10/15/2010	9	5/20/2011	11	12/23/2011	13
10/22/2010	9	5/27/2011	11	12/30/2011	13
10/29/2010	9	6/3/2011	11	1/6/2012	13
11/5/2010	9	6/10/2011	11	1/13/2012	14
11/12/2010	9	6/17/2011	11	1/20/2012	12
11/19/2010	10	6/24/2011	11	1/27/2012	12
11/26/2010	16	7/1/2011	11	2/3/2012	15
12/3/2010	16	7/8/2011	11	2/10/2012	15
12/10/2010	12	7/15/2011	14	2/17/2012	14
12/17/2010	12	7/22/2011	14	2/24/2012	14
12/23/2010	12	7/29/2011	14	3/2/2012	14
12/31/2010	12	8/5/2011	14	3/9/2012	15
1/7/2011	12	8/12/2011	14	3/16/2012	15
1/14/2011	12	8/19/2011	14	3/23/2012	10
1/21/2011	12	8/26/2011	14	3/30/2012	9
1/28/2011	12	9/2/2011	14	4/5/2012	9
2/4/2011	12	9/9/2011	14	4/13/2012	9
2/11/2011	12	9/16/2011	14	4/20/2012	9
2/18/2011	12	9/23/2011	13	4/27/2012	9
2/25/2011	12	9/30/2011	12	5/4/2012	9
3/4/2011	12	10/7/2011	12	5/11/2012	9
3/11/2011	12	10/14/2011	12	5/18/2012	9
3/18/2011	13	10/21/2011	12	5/25/2012	9
3/25/2011	13	10/28/2011	12	6/1/2012	9
4/1/2011	13	11/4/2011	13	6/8/2012	9
4/8/2011	13	11/10/2011	13	6/15/2012	9
4/15/2011	13	11/18/2011	13	6/22/2012	9
4/21/2011	13	11/25/2011	13	6/29/2012	9
4/29/2011	13	12/2/2011	13	7/6/2012	9
5/6/2011	11	12/9/2011	12	7/13/2012	12

	Underlying		Underlying		Underlying
	30yr GO vs.		30yr GO vs.		30yr GO vs.
	insured GO		insured GO		insured GO
	bond (in		bond (in		bond (in
	single A		single A		single A
	underlying		underlying		underlying
	rating		rating		rating
	category)		category)		category)
	A GO 30 yr - Insured		A GO 30 yr - Insured		A GO 30 yr - Insured
	Scales 30 yr		Scales 30 yr		Scales 30 yr
7/20/2012	14	2/22/2013	Scales 50 yr	9/27/2013	7
7/27/2012	14	3/1/2013	8	10/4/2013	7
8/3/2012	14	3/8/2013	8	10/11/2013	7
8/10/2012	14	3/15/2013	8	10/18/2013	7
8/17/2012	14	3/22/2013	8	10/25/2013	7
8/24/2012	14	3/28/2013	8	11/1/2013	7
8/31/2012	14	4/5/2013	8	11/8/2013	7
9/7/2012	15	4/12/2013	8	11/15/2013	9
9/14/2012	15	4/19/2013	7	11/22/2013	9
9/21/2012	15	4/26/2013	7	11/29/2013	9
9/28/2012	16	5/3/2013	8	12/6/2013	9
10/5/2012	16	5/10/2013	8	12/13/2013	9
10/12/2012	16	5/17/2013	8	12/20/2013	9
10/19/2012	16	5/24/2013	10	12/27/2013	9
10/26/2012	16	5/31/2013	11	1/3/2014	9
11/2/2012	16	6/7/2013	10	1/10/2014	10
11/9/2012	16	6/14/2013	10	1/17/2014	10
11/16/2012	16	6/21/2013	10	1/24/2014	10
11/23/2012	16	6/28/2013	-5	1/31/2014	10
11/30/2012	16	7/5/2013	10	2/7/2014	10
12/7/2012	15	7/12/2013	10	2/14/2014	10
12/14/2012	13	7/19/2013	10	2/21/2014	10
12/21/2012	13	7/26/2013	10	2/28/2014	10
12/28/2012	13	8/2/2013	10	3/7/2014	10
1/4/2013	13	8/9/2013	10	3/14/2014	10
1/11/2013	13	8/16/2013	10	3/21/2014	10
1/18/2013	13	8/23/2013	7	3/28/2014	10
1/25/2013	8	8/30/2013	7	4/4/2014	10
2/1/2013	8	9/6/2013	6	4/11/2014	10
2/8/2013	8	9/13/2013	7	4/17/2014	10
2/15/2013	8	9/20/2013	7	4/25/2014	10

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating category) A GO 30 yr -
	Insured Scales 30 yr
5/2/2014	10
5/9/2014	9
5/16/2014	9
5/23/2014	6
5/30/2014	7
6/6/2014	7
6/13/2014	7
6/20/2014	9
6/27/2014	9
7/3/2014	9
7/11/2014	9
7/18/2014	9
7/25/2014	9
8/1/2014	9
8/8/2014	9
8/15/2014	9
8/22/2014	9
8/29/2014	9
9/5/2014	9
9/12/2014	9
9/19/2014	9
9/26/2014	9

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating category)
	A GO 30 yr -
	Insured
10/2/2014	Scales 30 yr
10/3/2014	9
10/10/2014	9
10/1//2014	9
10/24/2014	9
11/7/2014	9
11/14/2014	9
11/21/2014	9
11/28/2014	9
12/5/2014	9
12/12/2014	9
12/19/2014	9
12/26/2014	9
1/2/2015	9
1/9/2015	9
1/16/2015	9
1/23/2015	9
1/30/2015	9
2/6/2015	9
2/13/2015	9
2/20/2015	9
2/27/2015	9

	Underlying 30yr GO vs. insured GO bond (in single A underlying rating category)
	A GO 30 yr -
	Insured Scales 30 yr
3/6/2015	Scales 30 yr
3/13/2015	9
3/20/2015	9
3/27/2015	9
4/2/2015	9
4/10/2015	9
4/17/2015	9
4/24/2015	9
5/1/2015	9
5/8/2015	9
5/15/2015	9
5/22/2015	9
5/29/2015	9
6/5/2015	9
6/12/2015	9
6/19/2015	9
6/26/2015	9